CLAIMS AMENDMENTS

Please amend the claims as follows:

Claims 1-28 (cancelled)

29.   (currently amended) An isolated oligonucleotide specifically hybridizable under moderate stringency hybridization ~~stringent~~ conditions, equivalent ~~corresponding~~ to 40% formamide with 5x or 6x SSC, to the nucleic acid molecule encoding on expression a soluble leptin receptor polypeptide selected from the group consisting of:

     a.   a DNA molecule of SEQ ID NO: 9; and

     ~~b.~~   ~~a DNA molecule complementary to the DNA molecule defined in (a); and~~

     ~~c.~~b.   a DNA molecule that codes on expression for the soluble leptin receptor polypeptide encoded by any of the foregoing DNA molecules,

wherein said oligonucleotide does not hybridize under moderate stringency hybridization conditions to nucleic acid encoding the leptin receptor polypeptide of SEQ ID NO: 84.

30.   (currently amended) An isolated oligonucleotide specifically hybridizable under moderate stringency hybridization ~~stringent~~ conditions, equivalent ~~corresponding~~ to 40% formamide with 5x or 6x SSC, to the nucleic acid molecule which codes on expression for a soluble leptin receptor polypeptide selected from the group consisting of:

     a.   a soluble leptin receptor ~~selected from the group consisting of~~ OB-Re (SEQ ID NO:10)~~, or allelic variants thereof~~; and

     b.   a leptin receptor ~~consisting essentially~~ of amino acids 28-805 of SEQ ID NO:10,

wherein said oligonucleotide does not hybridize under moderate stringency hybridization conditions to nucleic acid encoding the leptin receptor polypeptide of SEQ ID NO: 84.

31.   (currently amended) An isolated oligonucleotide specifically hybridizable under moderate stringency hybridization ~~stringent~~ conditions, equivalent ~~corresponding~~ to 40% formamide with 5x or 6x SSC, to the nucleic acid molecule having ~~a~~ the nucleotide sequence corresponding or complementary to the DNA sequence set forth in SEQ ID NO: 9, wherein said oligonucleotide does not hybridize under moderate stringency hybridization conditions to nucleic acid encoding the leptin receptor polypeptide of SEQ ID NO: 84.

Claims 32- 66 (cancelled)

67.   (withdrawn and currently amended) A method for diagnosing body weight abnormalities in a mammal comprising detecting splice variants of soluble leptin receptor OB-R in a patient sample comprising contacting a sample suspected of containing splice variants of soluble leptin receptor OB-R with an oligonucleotide specifically hybridizable under <u>moderate stringency hybridization</u> ~~stringent~~ conditions, <u>equivalent</u> ~~corresponding~~ to 40% formamide with 5x or 6x SSC, to the nucleic acid molecule which codes on expression for a soluble leptin receptor polypeptide selected from the group consisting of:

        a.   a leptin receptor ~~selected from the group consisting of~~ OB-Re (SEQ ID NO:10)~~, or allelic variants thereof~~; and
        b.   a leptin receptor ~~consisting essentially~~ of amino acids 28-805 of SEQ ID NO:10<u>,</u>

<u>wherein said oligonucleotide does not hybridize under moderate stringency hybridization conditions to nucleic acid encoding the leptin receptor polypeptide of SEQ ID NO: 84.</u>

68.   (withdrawn and currently amended) A method for diagnosing body weight abnormalities in a mammal comprising detecting splice variants of soluble leptin receptor OB-R in a patient sample comprising contacting a sample suspected of containing splice variants of soluble leptin receptor OB-R with an oligonucleotide specifically hybridizable under <u>moderate stringency hybridization</u> ~~stringent~~ conditions, <u>equivalent</u> ~~corresponding~~ to 40% formamide with 5x or 6x SSC, to the nucleic acid molecule which codes on expression for a polypeptide selected from the group consisting of SEQ ID NO: 10, or allelic variants thereof<u>, wherein said oligonucleotide does not hybridize under moderate stringency hybridization conditions to nucleic acid encoding the leptin receptor polypeptide of SEQ ID NO: 84.</u>

69.   (withdrawn and currently amended) A method for measuring the expression of splice variants of soluble leptin receptor OB-R in a patient sample comprising contacting a sample suspected of containing splice variants of soluble leptin receptor OB-R with a oligonucleotide specifically hybridizable under <u>moderate stringency hybridization</u> ~~stringent~~ conditions, <u>equivalent</u> ~~corresponding~~ to 40% formamide with 5x or 6x SSC, to the nucleic acid molecule which codes on expression for a polypeptide selected from the group consisting of:
        a.   a leptin receptor ~~selected from the group consisting of~~ OB-Re (SEQ ID NO:10)~~, or allelic variants thereof~~; and
        b.   a leptin receptor ~~consisting essentially~~ of amino acids 28-805 of SEQ ID NO:10<u>,</u>

<u>wherein said oligonucleotide does not hybridize under moderate stringency hybridization conditions to nucleic acid encoding the leptin receptor polypeptide of SEQ ID NO: 84.</u>

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70.   (withdrawn and currently amended) A method for measuring the expression of splice variants of soluble leptin receptor OB-R in a patient sample comprising contacting a sample suspected of containing splice variants of soluble leptin receptor OB-R with a oligonucleotide specifically hybridizable under <u>moderate stringency hybridization</u> ~~stringent~~ conditions, <u>equivalent</u> ~~corresponding~~ to 40% formamide with 5x or 6x SSC, to the nucleic acid molecule which codes on expression for a polypeptide selected from the group consisting of SEQ ID NO: 10<u>, wherein said oligonucleotide does not hybridize under moderate stringency hybridization conditions to nucleic acid encoding the leptin receptor polypeptide of SEQ ID NO: 84.</u>
~~, or allelic variants thereof.~~

71.   (withdrawn) The method of any of claims 67-70 wherein the oligonucleotide is labeled.

72.   (withdrawn) The method of any of claims 67-70 wherein the nucleic acid molecule is RNA.

73.   (withdrawn and previously amended) The method of any of claims 67-70 wherein the oligonucleotide is selected from the group consisting of SEQ ID NO: 20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54.